

CLAIMS

WHAT IS CLAIMED IS:

1 1. In a SOHO network having a SOHO network device and an active management
2 computer, an active management system for controlling real-time operation of the SOHO
3 network device comprising:

4 a active management console module configured to operate in the active
5 management personal computer, the active management console module
6 for enabling real-time communication of active management queries
7 between the SOHO network device and a user at the active management
8 personal computer during operation of the SOHO network device; and
9 an active management agent module configured to operate in the SOHO network
10 device for communicating real-time active management queries between
11 the active management console module and the SOHO network device.

1 2. The system of claim 1, further comprising, a firewall module configured to
2 operate in the SOHO network device and communicatively coupled to the console agent
3 for implementing firewall rules in response to query responses from a user.

1 3. The system of claim 1, wherein the active management agent module further
2 comprises a memory device for storing a set of lists.

1 4. The system of claim 3, wherein the set of lists comprises at least one of an
2 approved internal IP address list, an approved destination IP addresses and ports list, a

3 content managed computer identifier list, and a content approved URL and Domain
4 Name list.

1 5. The system of claim 1, further comprising a second active management console
2 module operating in a second active management personal computer in the SOHO
3 network.

1 6. The system of claim 1, wherein the active management console module is
2 implemented in software executable by a processor in a personal computer.

1 7. The system of claim 1, wherein the active management agent module is
2 implemented in software executable by a processor in the SOHO network device.

1 8. The system of claim 1, wherein the active management agent module and the
2 active management console module include a protocol stack, the protocol stack for
3 enabling communications between the active management agent module and the active
4 management console module to implement the a set of active management gateway
5 functions.

1 9. In a SOHO network having an active management computer and a gateway
2 device, a method for enabling real-time user input for implementing active management
3 gateway functions, the method comprising:

4 receiving one or more data packets that trigger a code to implement an active
5 management gateway function;

6 in response to receiving the one or more data packets, sending an active
7 management query from the gateway device to a active management
8 console module at the active management computer;
9 receiving an active management query response from the active management
10 console module at the active management computer; and
11 in response to receiving the active management query response, implementing the
12 active management gateway function at the gateway device according to
13 the information provided in the active management query response.

1 10. The method of claim 9, further comprising displaying options based on the active
2 management query to a user at the active management personal computer.

1 11. The method of claim 9, wherein the active management gateway function is a user
2 input based firewall rule.

1 12. The method of claim 9, wherein the active management gateway function is a
2 real-time, personal, content-filtering function to prompt a user at the active management
3 computer for access authorization based on one of a domain name or a URL.

1 13. The method of claim 12, further comprising, in response to receiving an active
2 management query response from the active management console module indicating an
3 access grant to a domain name, storing an identifier corresponding to the domain name
4 with an access rule to be automatically implemented for subsequent accessing of said
5 domain.

1 14. The method of claim 9, wherein the active management gateway function is a
2 real-time, user access authorization function to prompt a user at the active management
3 personal computer for access authorization to a WAN for a second personal computer in
4 the SOHO network.

1 15. The method of claim 14, wherein the access authorization is based on one of a
2 user name or a network computer identification.

1 16. The method of claim 9, wherein implementing active management gateway
2 function includes a creating an ALG at the SOHO network device in response to a user
3 approval of a suggested ALG authorization request included in the active management
4 query.

1 17. In a SOHO network having an active management computer and a gateway
2 device, a system for enabling real-time user input for implementing active management
3 gateway functions, the system comprising:

4 means for receiving one or more data packets that trigger a code to implement an
5 active management gateway function;

6 means for sending an active management query from the gateway device to an
7 active management computer in response to receiving the one or more
8 data packets;

9 means for receiving an active management query response from the active
10 management computer; and

11 means for implementing the active management gateway function at the gateway
12 device according to the information provided in the active management
13 query response in response to receiving the active management query
14 response.

1 18. The system of claim 17 further comprising means for displaying options based on
2 the active management query to a user at the active management personal computer.